

**BEFORE THE APPEALS BOARD  
FOR THE  
KANSAS DIVISION OF WORKERS COMPENSATION**

**MICHIAL GROVE, DECEASED**

Claimant

VS.

**AGRELIANT GENETICS, LLC**

Respondent

AND

**NORTH RIVER INSURANCE CO.**

Insurance Carrier

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Docket No. 1,053,249

**ORDER**

Respondent requested review of the May 21, 2012 Award by Administrative Law Judge (ALJ) Pamela J. Fuller. The Board heard oral argument on September 11, 2012.

**APPEARANCES**

Thomas M. Warner, of Wichita, Kansas, appeared for the claimant. D'Ambra Howard, of Overland Park, Kansas, appeared for respondent and its insurance carrier. Due to a conflict, Board Member Gary R. Terrill has recused himself from this appeal. Accordingly, E.L. Lee Kinch, of Wichita, Kansas has been appointed as a Board Member Pro Tem. Due to the retirement of Board Member David A. Shufelt, Jeffrey King, of Salina, Kansas was been appointed as a Board Member Pro Tem in this appeal.

**RECORD AND STIPULATIONS**

The Board has considered the record and adopted the stipulations listed in the Award. In his brief to the Board dated July 18, 2012, claimant objected to the filing of a brief by respondent as the assigned time for filing same had passed. However, at the oral argument to the Board, claimant advised that the objection to the untimely filing of respondent's brief to the Board was no longer an issue for the Board's consideration. Therefore, respondent's brief to the Board, filed August 2, 2012, has been received and was considered by the Board.

### ISSUES

The ALJ found that claimant's accident and resulting death arose out of and in the course of his employment with respondent and ordered respondent to pay death benefits to claimant's wife.

Respondent appeals arguing that claimant's automobile accident did not kill claimant, therefore claimant's death is not compensable. Respondent contends that claimant died as the result of a sudden heart attack and not from the automobile accident. Respondent asks the Board to overturn the ALJ's determination that claimant's death was compensable under the Workers Compensation Act (Act).

Claimant contends that the ALJ's Award should be affirmed. Claimant argues that the evidence clearly supports the conclusion that claimant's death was the result of blunt force trauma from a collision with a semi truck. Claimant argues that to conclude that claimant died from sudden cardiac death just seconds before impact with the semi truck would require speculation and there is no credible evidence to support respondent's position.

### Issues

Did claimant suffer personal injury by accident which arose out of and in the course of his employment, i.e. was claimant's death the result of the blunt force trauma from the automobile accident, or the result of a heart attack?

It was not argued in this appeal whether claimant's heart attack was caused by exertion which was more than claimant's usual exertion at work, nor whether claimant's heart attack on the date of the accident was caused by a work-related external force. The dispute centers on the timing of the alleged heart condition as it relates to the moment of and cause of claimant's death.

### FINDINGS OF FACT

Claimant's job with respondent was as a district sales manager, selling seed to dealers and farmers. Claimant primarily worked in Western Kansas, but also had business in Southwest and Central Kansas. He was on the road everyday and carried with him his company issued computer and cell phone, company manuals and corn seed.

On April 21, 2010, claimant was in his car headed to Hugoton by way of Colby, Phillipsburg and Norton, when he was killed in an auto accident outside of Colby two and a half to three hours after leaving his home in Mankato. Claimant's truck crossed the center line of the road and collided with two semi trucks, sideswiping the first and striking

the second truck head on. The accident reconstruction report indicated that claimant did not brake or take any evasive action prior to the collision.<sup>1</sup>

Claimant's widow testified that claimant was in good health and in a good mood on the day of the accident. She did admit that claimant had congestive heart failure, which involves fluid around the heart and that claimant also suffered from sleep apnea. Both conditions were being medically treated.

Board certified pathologist and medical examiner Lyle Noordhoek, M.D., a pathologist in Hays, Kansas and deputy coroner for the 23rd Judicial District, testified that there are five basic manners of death used for a death certificate: natural causes, accident, homicide, suicide and undetermined. Pending investigation is also used if a determination has not been made yet. On the death certificate he put "Motor Vehicle Accident" as the manner of death with the approximate interval before the death noted as "instant".

Dr. Noordhoek performed the autopsy on claimant. He found claimant's cause of death to be "loss of vehicular control due to, or as a consequence of, probable cardiac arrhythmia associated with biatrial and binventricular cardiac dilatation and hypertrophy and prior myocardial infarcts with scarring and significant coronary artery atherosclerosis."<sup>2</sup> Dr. Noordhoek opined that if he were to be more specific, he would have filled out the death certificate to say that coronary artery disease was a significant condition that contributed to claimant's death.

Dr. Noordhoek testified that massive blunt force trauma was the cause of claimant's death and that the trauma was caused when claimant's vehicle collided with the trucks and trailers of the semis after crossing the center line of the road. At the time of the autopsy, Dr. Noordhoek did not have the statements of the second semi driver which indicated that claimant looked like he was reaching for something in the right floorboard and never looked up, almost like there was something wrong with him.<sup>3</sup>

Dr. Noordhoek testified that he truncated his examination of claimant's body after he got into the chest cavity because he had sufficient evidence to determine the cause of death without having to examine claimant's other organs based upon the fact that claimant's cranial vault was already ruptured and the chest was torn open by the force of the accident. Both his brain and heart were exposed. Also, he noted claimant's heart to be abnormally large during the course of his examination.<sup>4</sup>

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<sup>1</sup> Noordhoek Depo., Ex 4.

<sup>2</sup> Noordhoek Depo., Ex. 3 at 1 (Autopsy Report dated Apr. 21, 2010).

<sup>3</sup> Noordhoek Depo. at 47.

<sup>4</sup> Noordhoek Depo. at 20-21.

Dr. Noordhoek found claimant's heart to be enlarged and the coronary arteries were calcific and stenotic. In his examination of claimant's heart, Dr. Noordhoek also found significant areas of old myocardial fibrosis suggestive of previous myocardial infarct. This means that there was insufficient blood flow to a portion of the heart and the heart was scarred. This suggested that claimant had suffered a prior heart attack at some point.

Dr. Noordhoek was asked whether there was evidence of claimant suffering a heart attack at the time of the collision and he testified that there was. He went on to state that besides the narrowing of the coronary arteries and the scarring of the heart, there are areas where the myocardial fibers show a discoloration which is an indication of a disruption of blood flow.<sup>5</sup> The type of discoloration he found in claimant's heart indicates the onset of a new myocardial infarct.

When asked to describe the heart event claimant was likely having at the time of the accident Dr. Noordhoek testified that given the size of claimant's heart and the complex nature of the scarring in the heart it's likely claimant had an arrhythmia which resulted in loss of consciousness.<sup>6</sup> Dr. Noordhoek went on to testify that a person can have an abnormal heart with an arrhythmia and not die from that. He opined that people with hearts the size and shape of claimant's frequently don't ambulate very well because they don't have good circulation and are at risk of developing a pulmonary thromboembolism, which could result in sudden unexpected loss of consciousness within 3 to 10 seconds, followed by death.<sup>7</sup> However, Dr. Noordhoek stated that a person would not be dead at the point of unconsciousness. They would, typically, slump with the onset of a sudden arrhythmia.

Also as part of claimant's autopsy, Dr. Noordhoek took tissue samples from claimant's lungs, heart and brain. Dr. Noordhoek determined that claimant's brain was liquified by the force of the impact. He found no evidence of any pulmonary embolism. He did find evidence of myocardial fiber, nuclear hyperplasia and focal areas of fibrosis in the right ventricle of claimant's heart. As he continued through the sections of the heart he found that claimant's heart had suddenly stopped and the trauma of the accident forced the heart against the anterior surfaces of the chest, resulting in a contusion, bruising and bleeding into the surface of the heart. Dr. Noordhoek determined that claimant would have been at risk for sudden arrhythmia. That could result in a person becoming unconscious within a few seconds, causing the person to slump over if they are in a vehicle.

Dr. Noordhoek testified that the blood around the arteries, indicated that "the heart had suddenly stopped; that the trauma of the accident had forced the heart against the

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<sup>5</sup> Noordhoek Depo. at 29.

<sup>6</sup> Noordhoek Depo. at 30.

<sup>7</sup> Noordhoek Depo. at 33.

anterior surface of the chest".<sup>8</sup> He went on to testify that the blunt force trauma, in and of itself, would be enough to have killed claimant regardless of whether he suffered the arrhythmia.

In the 25 years that Dr. Noordhoek has been performing autopsies, he testified that he has seen a lot of car wrecks where the driver crossed the center line for reasons that have nothing to do with loss of consciousness, such as reaching for a cell phone or doing something that is distracting, resulting in the vehicle leaving its lane and causing an accident. There is no evidence to support that claimant was dead before the time of the impact with the semi. Dr. Noordhoek also stated that there would be no way to tell if claimant's heart was still functioning at the time of the deceleration injury.<sup>9</sup>

On July 29, 2011, Michael Farrar, M.D., board certified cardiologist and medical examiner and adult cardiologist, submitted his report after being asked to perform a document review associated with claimant's death. Dr. Farrar opined in a letter dated July 29, 2011, that claimant had an extensive history of cardiovascular disease prior to his death, and that most likely claimant suffered cardiac death prior to his truck accident. Dr. Farrar opined that the mostly likely reason for claimant's cardiac death was ventricular fibrillation and that claimant was at a very high risk of sudden cardiac death secondary to ventricular arrhythmias due to his severe three-vessel coronary artery disease, prior myocardial infarction, left ventricular dysfunction, left ventricular hypertrophy, untreated obstructive sleep apnea<sup>10</sup>, and continued cigarette smoking.

Dr. Farrar is not a pathologist and did not review the tissue slides from claimant's autopsy and as a cardiologist he usually doesn't participate in autopsies. Although, he has participated in some autopsies in the past.

Dr. Farrar testified that at the time of death, claimant had an enlarged heart. Claimant's heart weighed 795 grams and a normal heart would weigh about 250 to 350 grams. Claimant also had severe three vessel coronary disease and calcification in all arteries and greater than 80 percent stenosis or narrowing of all three major coronary arteries. Dr. Farrar testified that claimant also had evidence of a previous heart attack, myocardial infarction and evidence of diffuse myocardial fibrosis. He testified that as a result of claimant's ventricular fibrillation, claimant's heart was not pumping effectively and this caused loss of consciousness, resulting in the accident and that it is unlikely that a defibrillator would have been immediately available in rural Kansas to successfully resuscitate claimant.

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<sup>8</sup> Noordhoek Depo. at 37.

<sup>9</sup> Noordhoek Depo. at 74.

<sup>10</sup> He opined that this condition put claimant at greater risk for a heart attack and stroke.

Dr. Farrar testified that, with respect to the events of April 21, 2010, it is most likely that claimant had sudden cardiac death, that he developed ventricular fibrillation while he was driving, lost consciousness, slumped forward, crossed over the central line, hit one truck and then diverted into the second truck and ended up in the field. Never the less he always agreed with the coroner who signed the death certificate that claimant's death was secondary to coronary artery disease. He also determined that the truck collision and accident resulted from the sudden heart condition and death.<sup>11</sup>

Dr. Farrar agreed that claimant suffered from massive blunt trauma. In his letter, he stated that claimant's cranial vault ruptured and his brain was destroyed and his chest was torn open. He testified that, setting aside the heart issue, the blunt trauma claimant suffered would be enough to cause claimant's death.<sup>12</sup>

Dr. Farrar testified that although claimant has never had any previous history of sudden loss of consciousness from any cause, it does not rule out the possibility of a sudden cardiac death in this case.<sup>13</sup> He acknowledged that a patient with an abnormal heart can have an arrhythmia, lose consciousness and not die depending on the arrhythmia. A person can also have coronary artery disease and not die from it.

When Dr. Farrar was asked at what point in time claimant died, he responded that it was when claimant slumped over and lost consciousness while driving and before he crossed the lane. In Dr. Farrar's opinion, claimant was dead before he hit the truck. However, in his letter report of July 29, 2011, Dr. Farrar stated that had claimant swerved into a field and missed the second truck and not sustained the trauma, claimant still would have "most likely died".<sup>14</sup>

At claimant's attorney's request, board certified internal medicine and cardiology specialist Roger Evans, M.D., performed a document review in order to make comments concerning claimant's death. On November 16, 2011, he issued his report upon review of Dr. Noordhoek's deposition with exhibits, Dr. Farrar's deposition with exhibits, the autopsy report, the accident report, the death certificate, KBI report, photographs of the accident and Jewell County Rural Health Clinic medical records.

Dr. Evans testified that in his opinion claimant's cause of death was blunt force trauma that crushed his chest and ruptured his brain and skull. He testified that he had no evidence to show that claimant's was experiencing a heart attack at the time he drifted to

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<sup>11</sup> Farrar Depo., Ex. 2 at 2 (Dr. Farrar's July 29, 2011 letter).

<sup>12</sup> Farrar Depo. at 32.

<sup>13</sup> Farrar Depo. at 27.

<sup>14</sup> Farrar Depo., Ex. 2 at 1 (Dr. Farrar's July 29, 2011 letter).

the center lane. Although he did not feel it was the case with claimant, Dr. Evans testified that it is possible for a person to die from sudden cardiac death without any previous history of sudden loss of consciousness or history of a heart attack.

Dr. Evans testified that claimant's heart was not in the best shape, but its condition did not have anything to do with the accident. Based on the information available, there was no undue stress put on claimant's heart at the time. He agreed that claimant was at greater risk of having another heart attack, but not of having a fatal rhythm disturbance.<sup>15</sup>

Q. . . . I understand your testimony to be that because Mr. Grove had a prior heart attack, that makes him more at risk for another heart attack?

A. True.

Q. But that doesn't necessarily make him more at risk for a fatal rhythm disturbance, such as ventricular fibrillation?

A. Probably true.

Q. And you identified that his medical history of sleep apnea, plus the evidence, and I believe the toxicology, of Benadryl in a system would make somebody more sleepy?

A. Yes.

Q. And is it correct to say that you could conclude just as easily that maybe Mr. Grove fell asleep behind the wheel?

A. That's possible.<sup>16</sup>

During his review of claimant's past medical records Dr. Evans noted that the August 2009 heart attack suffered by claimant did not involve any rhythm disturbances or fainting. Additionally, the fact that claimant's potassium level was good and he wasn't on Digitalis would indicate claimant's potential for a rhythm disturbance was small.<sup>17</sup>

When asked what evidence would be required to verify that claimant suffered a sudden cardiac death, Dr. Evans stated that the person would have to be wearing a pacemaker or Holter monitor that records rhythm in order to pinpoint the exact moment of

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<sup>15</sup> Evans Depo. at 55.

<sup>16</sup> Evans Depo. at 60.

<sup>17</sup> Evans Depo. at 23.

a rhythm disturbance. He agreed that claimant could have suffered from a cardiac condition that rendered him unconscious but not dead at the time of the accident.

Based on everything he reviewed, Dr. Evans opined that claimant died from blunt force trauma from the impact with the semis. He went on to state that any other conclusion would be speculation.<sup>18</sup>

### **PRINCIPLES OF LAW AND ANALYSIS**

In workers compensation litigation, it is the claimant's burden to prove his or her entitlement to benefits by a preponderance of the credible evidence.<sup>19</sup>

The burden of proof means the burden of a party to persuade the trier of fact by a preponderance of the credible evidence that such party's position on an issue is more probably true than not true on the basis of the whole record.<sup>20</sup>

If in any employment to which the workers compensation act applies, personal injury by accident arising out of and in the course of employment is caused to an employee, the employer shall be liable to pay compensation to the employee in accordance with the provisions of the workers compensation act.<sup>21</sup>

The two phrases "arising out of" and "in the course of," as used in K.S.A. 44-501, et seq.,

. . . have separate and distinct meanings; they are conjunctive and each condition must exist before compensation is allowable. The phrase "in the course of" employment relates to the time, place and circumstances under which the accident occurred, and means the injury happened while the workman was at work in his employer's service. The phrase "out of" the employment points to the cause or origin of the accident and requires some causal connection between the accidental injury and the employment. An injury arises "out of" employment if it arises out of the nature, conditions, obligations and incidents of the employment."<sup>22</sup>

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<sup>18</sup> Evans Depo., Ex. 2.

<sup>19</sup> K.S.A. 44-501 and K.S.A. 44-508(g).

<sup>20</sup> *In re Estate of Robinson*, 236 Kan. 431, 690 P.2d 1383 (1984).

<sup>21</sup> K.S.A. 44-501(a).

<sup>22</sup> *Hormann v. New Hampshire Ins. Co.*, 236 Kan. 190, 689 P.2d 837 (1984); citing *Newman v. Bennett*, 212 Kan. 562, Syl. ¶ 1, 512 P.2d 497 (1973).



It is not disputed that the accident which occurred on April 21, 2010, resulting in the loss of claimant's life, arose "in the course of" claimant's employment as a traveling sales manager for respondent. The dispute centers around whether the accident arose "out of" claimant's employment with respondent or, was, instead, the result of a personal health condition of claimant's.

K.S.A. 2009 Supp. 44-501(e) states:

Compensation shall not be paid in case of coronary or coronary artery disease or cerebrovascular injury unless it is shown that the exertion of the work necessary to precipitate the disability was more than the employee's usual work in the course of the employee's regular employment.<sup>23</sup>

The medical records support a finding that claimant was suffering some type of heart problem while he was driving. K.S.A. 44-501(e) is commonly known as the heart amendment. However, the application of the heart amendment to this fact situation does not appear appropriate. There is no indication that claimant was exerting himself beyond his normal work. Driving a vehicle for long distances is typically the life of a traveling salesperson, regardless of what that person is selling. It is not contended here that claimant exerted himself beyond his normal work. Therefore, the heart amendment would not apply to this situation.

Another question which arises in these situations is whether the activities of the claimant were effected by an external force, which could cause a cerebrovascular or heart condition to become compensable. In *Dial*<sup>24</sup>, the Kansas Supreme Court found that excessive heat that the claimant was subjected to was the cause of the disability. The Court ruled that the heat, leading to a cardiovascular injury, did not bring the "heart amendment" into play because the agency which "precipitated" the disability was not the exertion of his work, but rather the external force of excessive heat. The Court held that where unusual exertion is not the agency leading to the disability, then the customary standards would be applied in determining whether the injury was accidental, and whether it arose out of and in the course of a worker's employment.<sup>25</sup> Here, there is no evidence of any excessive outside force to which claimant was being subjected which would have led to the heart condition suffered by claimant immediately prior to the accident.

The pertinent issue raised by respondent in this matter involves the timing of claimant's alleged cardiac arrhythmia as it relates to the horrendous impact of claimant's vehicle with the semi. Respondent argues, based upon the opinion of Dr. Farrar, that

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<sup>23</sup> K.S.A. 2005 Supp. 44-501(e).

<sup>24</sup> *Dial v. C.V. Dome Co.*, 213 Kan. 262, 515 P.2d 1046 (1973).

<sup>25</sup> *Dial*, 213 Kan. at 268.

claimant died of a sudden ventricular fibrillation just before the vehicles collided. Claimant argues, based upon the autopsy report, the opinion of Dr. Noordhoek and the opinion of Dr. Evans, that in the few seconds just prior to the impact claimant may have been unconscious, but he was still alive. The death was the result of significant blunt force trauma to claimant's body. A ventricular fibrillation could have rendered claimant unconscious, but not dead. Were this the case, then the accident would be compensable, based upon the Court of Appeals ruling in *Bennett*.<sup>26</sup> In *Bennett*, the claimant suffered from epileptic seizures. While driving a company truck, he suffered a seizure, blacked out, and hit a tree. The court ruled that:

. . .Where an employment injury is clearly attributable to a personal (idiopathic) condition of the employee, and no other factors intervene or operate to cause or contribute to the injury, no award is granted. (Citations omitted) But where an injury results from the concurrence of some preexisting idiopathic condition *and* some hazard of employment, compensation is generally allowed". (citation omitted).

In the medical opinion of Dr. Farrar, claimant died in the few seconds immediately before the crash. This would make claimant's death the result of a personal condition, and not compensable. Dr. Evans opined that claimant died from blunt force trauma. Based upon claimant's health history and physical condition, he did not believe that claimant was dead prior to the impact. Finally, Dr. Noordhoek testified that it would be pure speculation to say that claimant suffered a massive ventricular arrhythmia and almost instant death in the seconds leading to the crash.

The Board finds the opinions of Dr. Evans and Dr. Noordhoek to be more persuasive than that of Dr. Farrar. Claimant's death was the result of a work-related automobile accident involving significant blunt force trauma. The Award of the ALJ to claimant's widow, Debra Jean Grove, is affirmed.

### **CONCLUSIONS**

Having reviewed the entire evidentiary file contained herein, the Board finds that claimant suffered personal injury by accident which arose out of and in the course of his employment with respondent. Therefore, the Award of the ALJ should be affirmed.

### **AWARD**

**WHEREFORE**, it is the finding, decision and order of the Board that the Award of Administrative Law Judge Pamela J. Fuller dated May 21, 2012, is affirmed.

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<sup>26</sup> *Bennett v. Wichita Fence Co.*, 16 Kan. App. 2d 458, 824 P.2d 1001, rev. denied 250 Kan. 804 (1992).

**IT IS SO ORDERED.**

Dated this \_\_\_\_\_ day of November, 2012.

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BOARD MEMBER

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BOARD MEMBER

**DISSENT**

Although I believe there is sufficient evidence to support a decision either way in the above matter, I would find that this accident was not compensable. The pathologist, Dr. Noordhoek, found claimant's heart to be enlarged, there were significant areas of old myocardial fibrosis and three coronary arteries that were more than 80% occluded. Dr. Noordhoek, testified in this opinion that there was no way to tell whether the claimant's heart was still pumping at the time of the deceleration injury and he could not say within a reasonable degree of medical probability whether the claimant was alive at the time of impact with the second semi. Dr. Noordhoek also testified that tissue samples indicated discoloration in the myocardial fibers which was an indication that claimant was having a coronary event contemporaneous with the motor vehicle accident. Dr. Noordhoek believed the claimant had an arrhythmia which resulted in loss of consciousness and caused him to cross the center line resulting in the accident. When he did the autopsy, Dr. Noordhoek was not considering the issue of whether or not claimant was alive or dead prior to impact.

Dr. Farrar reviewed the records and felt there was no way to demonstrate claimant was alive at the time of impact with the semi. In Dr. Farrar's opinion, the claimant most likely suffered a sudden cardiac death and died as a result of the underlying cardiac condition then drifted across the center line. Dr. Farrar felt the most likely reason for claimant's cardiac death was ventricular fibrillation and that claimant was at a very high risk of sudden cardiac death secondary to ventricular arrhythmias due to severe three vessel coronary artery disease, prior myocardial infarction, left ventricular dysfunction, left ventricular hypertrophy, obstructive sleep apnea and continued cigarette smoking.

Dr. Evans reached the opposite conclusion, indicating that there was no way to tell if claimant was alive or even having a heart attack at the time of the accident. He acknowledged that a rhythm disturbance could be immediately fatal, but based on claimant's history and without evidence, such as the claimant being hooked to a monitor, he was not able to say claimant had a heart attack or died as a result of a cardiac arrhythmia prior to the accident. It was Dr. Evans' opinion that claimant died as a result of blunt force trauma and there was insufficient evidence to demonstrate claimant was experiencing a heart attack at the time of the collision.

It appears to this Board Member that the autopsy report and Dr. Noordhoek's testimony clearly indicated there was some type of coronary event going on or an acute disruption of blood flow occurring prior to the accident. This was based on tissue slides showing discoloration in the myocardial fibers. Dr. Noordhoek testified he believed the claimant had an arrhythmia which resulted in loss of consciousness. The autopsy findings seem inconsistent with Dr. Evans' opinion that there was no evidence of a coronary event or cardiac arrhythmia occurring at the time of the accident and I would be inclined to find Dr. Farrar's testimony more persuasive.

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